

MAY 06 2003



K031261

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**GE Medical Systems**

General Electric Company

P O Box 414 Milwaukee, WI 53201

## **510(k) SUMMARY OF SAFETY AND EFFECTIVENESS**

This 510(k) summary of safety and effectiveness information is submitted in accordance with the requirements of 21 CFR Part 807.87(h).

### **Submitter**

Larry A. Kroger, Ph.D.  
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Date Prepared: March 13, 2003

### **PRODUCT IDENTIFICATION**

Name: CardEP

Classification Name: Accessory to Computed Tomography System

Classification

Panel: 892 - Radiology

Classification

Number: 892.1750

Manufacturer : General Electric Medical Systems  
283, rue de la Miniere  
78533 Buc Cedex, FRANCE

Distributor: General Electric Medical Systems, Milwaukee, WI

**Marketed Devices** CardEP is substantially equivalent to the device listed below:

Model: CardIQ Analysis II  
Manufacturer: General Electric Medical Systems, Milwaukee, WI  
510(k) #: K020796

### **Device Description:**

The CardEP option is a post processing software option for the Advantage Workstation (AW) Platform. This product can be used in the analysis of CT angiographic images to display structures of the heart in a MIP, reformat, volume rendering and vessel fly through view. The software has an ability to automatically segment out cavities of the heart, measure the diameter of the vessels and export models of the heart for further review.

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**Indications for Use:**

CardEP is a post processing software option for the Advantage Workstation (AW) Platform. This product can be used for the analysis of CT angiographic images for the assessment of the heart to include the atria, pulmonary veins, and coronary sinus. It provides quantitative analysis tools which include a number of display, measurement and model export capabilities. This product can be used to aid trained physicians in the visualization and assessment of cardiac anatomy.

**Comparison with Predicate:**

CardEP is a software option for CT Scanners. Features of this software package are substantially equivalent to the following device:

Device Name	FDA Clearance Number
CT CardIQ Analysis II	K020796

**Adverse Effects on Health :**

The potential hazards are identified in a risk management summary (hazard analysis) and are controlled by:

- Software Development, Validation and Verification Process to ensure performance to specifications, Federal Regulations and user requirements.
- Adherence to industry and international standards.

**Conclusions:**

CardEP does not result in any new potential safety risks and performs as well as devices currently on the market. GE considers features of the CardEP to be equivalent to those of CT CardIQ Analysis II (K020796).



Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

MAY 06 2003

GE Medical Systems, Inc.  
c/o Mr. Heinz Joerg Steneberg  
TÜV Rheinland of North America  
12 Commerce Road  
NEWTOWN CT 06470

Re: K031261

Trade/Device Name: Card EP, Version 1.0  
Regulation Number: 21 CFR §892.1750  
Regulation Name: Computed tomography x-ray system  
Regulatory Class: II  
Product Code: 90 JAK  
Dated: April 17, 2003  
Received: April 21, 2003

Dear Mr. Steneberg:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (sections 531-542 of the Act); 21 CFR 1000-1050.

This letter will allow you to begin marketing your device as described in your 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of Compliance at one of the following numbers, based on the regulation number at the top of this letter:

8xx.1xxx	(301) 594-4591
876.2xxx, 3xxx, 4xxx, 5xxx	(301) 594-4616
884.2xxx, 3xxx, 4xxx, 5xxx, 6xxx	(301) 594-4616
892.2xxx, 3xxx, 4xxx, 5xxx	(301) 594-4654
Other	(301) 594-4692

Additionally, for questions on the promotion and advertising of your device, please contact the Office of Compliance at (301) 594-4639. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). Other general information on your responsibilities under the Act may be obtained from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address <http://www.fda.gov/cdrh/dsma/dsmamain.html>.

Sincerely yours,



Nancy C. Brogdon  
Director, Division of Reproductive,  
Abdominal, and Radiological Devices  
Office of Device Evaluation  
Center for Devices and Radiological Health

Enclosure

STATEMENT OF INTENDED USE

510(k) Number (if known): K031261

Device Name: CardEP

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(PLEASE DO NOT WRITE BELOW THIS LINE - CONTINUE ON ANOTHER PAGE  
IF NEEDED)

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Concurrence of CDRH, Office of Device Evaluation (ODE)

Prescription Use ✓  
(Per 21 CFR 801.109)

-OR-

Over-The-Counter Use \_\_\_\_\_

David A. Eggen  
(Division Sign-Off)  
Division of Reproductive, Abdominal,  
and Radiological Devices

510(k) Number K031261